

IN THE SPECIFICATION:

Paragraph extends from page 8 line 24 to page 9 line 4

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In accordance with a preferred method of the present invention, an optical interconnect structure is formed by etching a silicon substrate with potassium hydroxide (KOH) at a controlled temperature to form reflecting structures (e.g., structures 212) on the substrate surface, thereby forming a reflecting surface 202 along the crystalline plane of the silicon. The crystalline plane of silicon forms an angle of approximately 125.6 degrees. Silicon oxide is then deposited onto the surface of the substrate using flame hydrolysis deposition, and the oxide is patterned and etched to form the waveguides (e.g., waveguides 204 or 304). A reflective coating is then deposited (e.g., using a flash deposition or evaporation process) onto a portion of the reflective, using photoresist as mask; conductive bond pads may also be formed on the surface of the substrate during this process. The centers of the waveguides are preferably aligned in the x, y, z directions with respect to the centers of the reflecting surface.